Results of the Seasonal Kendall Test for water quality trends in the Eastern Buffer WCZ, 1986 – 2005

Monitoring Station		EM1	EM2	EM3
Monitoring Period		1986 I 2005	1986 I 2005	1986 I 2005
Parameter	Water Depth			
Temperature (°C)	Surface	↗	↗	↗
	Middle	↗	↗	↗
	Bottom	↗	↗	↗
	Average	↗	↗	↗
Salinity	Surface	-	-	-
	Middle	-	-	-
	Bottom	-	-	↗
	Average	-	-	-
Dissolved Oxygen (mg/L)	Surface	↘	-	↘
	Middle	-	-	-
	Bottom	-	-	-
	Average	-	-	-
Dissolved Oxygen (%)	Surface	-	-	-
	Middle	-	-	-
	Bottom	-	-	-
	Average	-	-	-
pH	Surface	-	-	-
	Middle	-	-	-
	Bottom	-	-	-
	Average	-	-	-
Secchi disc depth (m)		-	-	-
Turbidity (NTU)	Surface	↗	↗	↗
	Middle	↗	↗	↗
	Bottom	↗	↗	↗
	Average	↗	↗	↗
Suspended Solids (mg/L)	Surface	↘	-	-
	Middle	↘	-	-
	Bottom	-	-	-
	Average	↘	-	-
Total volatile solids (mg/L)	Surface	↘	↘	↘
	Middle	↘	↘	↘
	Bottom	↘	-	-
	Average	↘	↘	↘
5-day Biochemical Oxygen Demand (mg/L)	Surface	-	-	-
	Middle	-	-	-
	Bottom	↘	-	-
	Average	-	-	-
Ammonia nitrogen (mg/L)	Surface	-	-	-
	Middle	-	-	-
	Bottom	↘	-	-
	Average	-	-	-
Nitrite nitrogen (mg/L)	Surface	-	-	-
	Middle	-	↘	-
	Bottom	↘	↘	-
	Average	-	↘	-
Nitrate nitrogen (mg/L)	Surface	-	-	-
	Middle	-	-	-
	Bottom	-	-	-
	Average	-	-	-
Total inorganic nitrogen (mg/L)	Surface	-	-	-
	Middle	-	-	-
	Bottom	-	↘	↘
	Average	-	-	-
Total Kjeldahl nitrogen (mg/L)	Surface	↘	↘	↘
	Middle	↘	↘	↘
	Bottom	↘	↘	↘
	Average	↘	↘	↘
Total nitrogen (mg/L)	Surface	↘	↘	↘
	Middle	↘	↘	↘
	Bottom	↘	↘	↘
	Average	↘	↘	↘
Orthophosphate phosphorus (mg/L)	Surface	-	-	-
	Middle	-	-	-
	Bottom	-	-	-
	Average	-	-	-
Total phosphorus (mg/L)	Surface	↘	↘	↘
	Middle	↘	↘	↘
	Bottom	↘	↘	↘
	Average	↘	↘	↘
Silica (mg/L)	Surface	-	-	-
	Middle	-	-	-
	Bottom	-	-	-
	Average	-	-	-
Chlorophyll-*a* (µg/L)	Surface	-	-	-
	Middle	-	-	-
	Bottom	-	-	-
	Average	-	-	-
E. coli (cfu/100mL)	Surface	-	-	-
	Middle	-	↘	↘
	Bottom	-	↘	↘
	Average	-	↘	↘
Faecal coliforms (cfu/100mL)	Surface	-	-	-
	Middle	-	-	-
	Bottom	-	-	-
	Average	-	-	-

Note: 1. Results of the Seasonal Kendall Test statistically significant at $p < 0.05$
2. - indicates no significant trend
3. Test applied to past 20 years' data from each station unless stated otherwise
4. ↗ significant increase
5. ↘ significant decrease